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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,779	07/21/2003	Harald Genger	SEUS1	6099

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NEWTON, MA 02466

EXAMINER	
LEWIS, AARON J	

ART UNIT	PAPER NUMBER
3743	

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/623,779	GENGER ET AL.	
	Examiner	Art Unit	
	AARON J. LEWIS	3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15,18 and 19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15 and 19* is/are rejected.

7)☒ Claim(s) *18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,5,13 are rejected under 35 U.S.C. 102(b) as being anticipated by Rapoport et al. ('502).

As to claim 1, Rapoport et al. disclose an anti-snoring device comprising a compressor (84,86) and a tube (74) connected to said compressor, wherein said compressor feeds compressed air through said tube to a nasal air cannula (102), said nasal air cannula in turn applying the compressed air into the a sleeping person's nose.

As to claim 5, Rapoport et al. disclose said compressor comprises a control (82) controlling the angular speed of a turbine of said compressor, thereby controlling the flow of air through the nasal air cannula.

As to claim 13, Rapoport et al. disclose a method for reducing snoring, comprising insufflating air into the nose of a sleeping person by means of a nasal air cannula (102).

3. Claims 15,19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hofstetter et al. ('077).

As to claim 15, Hofstetter et al. disclose a snore-reducing nasal air cannula, an outlets (90) said outlet having a jacket pipes (fig.6) wherein said jacket pipe has an end (130) near a patient's nose and said end is configured so that during operation it seals

substantially tightly the patient's nose (col.5, lines 25-30), and wherein a nozzle (80) is configured in the jacket pipe, said nozzle allowing blowing air toward said end of the jacket pipe near the patient's nose (col.5, lines 31-44).

As to claim 19, Hofstetter et al. disclose a measuring tubule (120 and col.5, lines 14,15) fitted with an aperture in the vicinity of said end near the patient's nose, said measuring tubule (being expressly disclosed by Hofstetter et al. as a monitoring pipe at col.5, lines 14,15) is fully capable of allowing measuring the-pressure in the nose of the patient.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2,3,14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rapoport et al. ('502) in view of Daniell et al. ('260).

The difference between Rapoport et al. and claim 2 is the compressed air being fed through an air humidifier before reaching the nasal air cannula.

As to claim 2, Daniell et al., in an anti-snoring device (figs.1 and 2), teach said compressed air is fed through an air humidifier before reaching the nasal air cannula for the purpose of preventing dehydration of the airways and nasal passages (col.1, lines 30-40 and col.2, lines 4-14).

It would have been obvious to modify the anti-snoring device of Rapoport et al. to include an air humidifier for humidifying the compressed air before reaching the nasal air cannula because it would have prevented dehydration of the airways and nasal passages as taught by Daniell et al..

As to claim 3, Daniell et al. teach the air humidifier comprises a water bath (6) and a temperature control (9) controlling the temperature of the water bath and hence the degree of air humiditication.

As to claim 14, Rapoport et al. as modified by Daniell et al. as discussed above with respect to claim 2 also teach a method for reducing snoring which includes the step of humidifying the air before insufflating.

6. Claims 4,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rapoport et al. ('502) in view of Zapf ('619).

The difference between Rapoport et al. and claim 4 is the tube being long enough so that the compressor may be located not in a bedroom where said sleeping person sleeps but in an adjacent room.

Zapt teaches a treatment air delivery tube (13) that is long enough so that the treated air generator (1,2,5,6) may be located not in a bedroom where said sleeping person sleeps but in an adjacent room for the purpose of providing treated breathable air to a plurality of patients in different rooms on a given floor and/or on different floors (page 1, lines 27-36).

It would have been obvious to modify Rapoport et al. to employ a length of air delivery tube such that the compressor may be located not in a bedroom where said

sleeping person sleeps but in an adjacent room because it would have enabled centralized location of treatment air generator and the provision of treated breathable air to a plurality of patients located in different parts of the same dwelling as taught by Zapt.

Claim 11 is substantially equivalent in scope to claim 4 and is included in Rapoport et al. as modified by Zapt for the reasons set forth above with respect to claim 4. Rapoport et al. as modified by Zapf additionally teaches a humidifier which is in the vicinity (i.e. within an adjacent room) of a sleeping person.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rapoport et al. ('502) in view of Buck et al. ('131).

The difference between Rapoport et al. and claim 6 is a throttle valve controlling pressure drop across said tube and thereby flow of air through the tube.

Buck et al., in a ventilator that includes a continuous positive airway mode (col.13, lines 11-27) teach a manually operable throttle valve (49) valve controlling pressure drop across said tube (50,52) and thereby flow of air through the tube.

It would have been obvious to modify the tube of Rapoport et al. to include a throttle valve on the tube because it would have provided a manually operable means for adjusting the pressure and flow of breathable gas being delivered to a patient as taught by Buck et al..

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rapoport et al. ('502) in view of Panzik et al. ('540).

The difference between Rapoport et al. and claim 7 is a bypass valve running from the tube into ambient in a manner that flow of air through the nasal air cannula is controlled by said bypass valve.

Panzik et al., in a anti-snoring device, teach is a bypass (22) valve running from the tube into ambient in a manner that flow of air through the nasal air cannula is controlled by said bypass valve for the purpose of providing a mixture of ambient air with therapeutic gas (col.2, lines 34-61).

It would have been obvious to modify the tube of Rapoport et al. to include a bypass valve running from the tube into ambient because it would have provided a mixture of ambient air with therapeutic gas as taught by Panzik et al..

9. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rapoport et al. ('502).

The difference between claim 8 and Rapoport et al. is the inside diameter of the tube being less than 10mm.

The dimensions of the tube of Rapoport et al. can be arrived at through mere routine obvious experimentation and observation with no criticality seen in any particular dimensions including an inside diameter of 10mm. One of ordinary skill would recognize that factors affecting the tube dimensions are patient age and size as well as compressor size. It would have been obvious to employ a tube size sufficient to deliver a safe and appropriate pressure/flow rate of therapeutic gas to a given patient in dependence upon patient age and size.

Claims 9 and 10 are substantially equivalent in scope to claim 8 and are included in Rapoport et al. for the reasons set forth above with respect to claim 8.

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rapoport et al. ('502) in view of Colla et al. (834).

The difference between Rapoport et al. and clalim 12 is the compressor and air humidifier being integrated into one apparatus.

Colla et al. (fig.1b), in an anti-snoring device, teach the compressor and air humidifier being integrated into one apparatus for the purpose of providing a convenient selective coupling arrangement for optionally adding/deleting a humidifier.

It would have been obvious to modify Rapoport et al. to include the compressor and an air humidifier integrated into one apparatus because it would have provided a convenient selective coupling arrangement for optionally adding/deleting a humidifier as taught by Colla et al..

Allowable Subject Matter

11. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

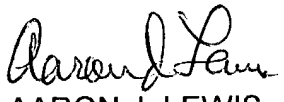
Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The balance of the art is cited to show relevant nasal cannula and anti-snore devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON J. LEWIS whose telephone number is (703) 308-0716. The examiner can normally be reached on 9:30AM-6:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HENRY A. BENNETT can be reached on (703) 308-0101. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



AARON J. LEWIS
Primary Examiner
Art Unit 3743

Aaron J. Lewis
September 25, 2004